

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 00/01390

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C07K 14/075, C12N 7/00, C12N 15/00
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C07K, C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9720051 A2 (GENVEC, INC.), 5 June 1997 (05.06.97), page 7, line 7 - line 17; page 11, line 22 - page 13, line 16; page 14, line 22 - page 17, line 22, page 33, line 31 - page 34, line 17; page 45, line 13 - line 27; page 77, line 1 - line 9; abstract --	1-6,9-12,15, 19-20,22-23
X	WO 9626281 A1 (GENVEC, INC. ET AL), 29 August 1996 (29.08.96), page 9, line 4 - line 13; page 13, line 23 - line 35; page 16, line 1 - line 6, page 23, line 15 - line 19; example 6 --	1-4,11-12, 15,22
A	--	23

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:	"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"I" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 2 November 2000	Date of mailing of the international search report 13 -11- 2000
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86	Authorized officer Henrik Nilsson/ELY Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 00/01390

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9720575 A1 (THE UNIVERSITY OF ALABAMA AT BIRMINGHAM RESEARCH FOUNDATION), 12 June 1997 (12.06.97), figure 8, example 8 --	23
A	JOURNAL OF VIROLOGY, Volume 71, No 6, June 1997, Susan C. Stevenson et al, "Selective Targeting of Human Cells by a Chimeric Adenovirus Vector Containing a Modified Fiber Protein", page 4782 - page 4790, see page 4782, right-hand-column --	12
P,X	WO 9941359 A1 (THE UAB RESEARCH FOUNDATION), 19 August 1999 (19.08.99), page 4, line 12 - page 5, line 29; page 7, line 20 - line 23; page 8, line 26 - page 9, line 2, page 9, line 19 - line 20; claims 1-15 -----	1-4,11-12, 15-16,22

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SE00/01390

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See extra sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SE00/01390

According to PCT Rules 13.1 and 13.2, an international application shall relate to one invention only or a group of inventions linked by one or more of the same corresponding "special technical features", i.e. features that define a contribution which each of the inventions makes over the prior art.

In Your application the following inventions have been found:

1. A recombinant adenovirus with modified tropism. The special technical feature of this invention is that the native knob containing the cell binding structure and the native trimerisation motif has been removed and a new cellbinding ligand and an external trimerisation motif has been introduced into the virus fiber. This invention is disclosed in claims 1-22 and has been searched.
2. A method in which the special technical feature is rescuing of recombinant adenovirus fibers into the adenovirus genome. This invention is disclosed in claim 23 and has been searched since the search could be performed within one search fee.

The two inventions are not linked by any common "special technical feature". Thus, the application lacks unity. Both inventions have been searched, since the search could be performed within one search fee.

INTERNATIONAL SEARCH REPORT

Information on patent family members

03/10/00

International application No.

PCT/SE 00/01390

WO	9720051	A2	05/06/97	AU	1086897	A	19/06/97
				BG	102554	A	30/04/99
				BR	9612685	A	20/07/99
				CZ	9801623	A	14/10/98
				EP	0863987	A	16/09/98
				IL	124654	D	00/00/00
				JP	11501219	T	02/02/99
				NO	982417	A	06/07/98
				PL	327038	A	09/11/98
				SK	72298	A	02/12/98
				US	5846782	A	08/12/98
				US	5965541	A	12/10/99
				US	6057155	A	02/05/00
				AU	4155597	A	06/03/98
				EP	0920524	A	09/06/99
				US	5962311	A	05/10/99
				WO	9807877	A	26/02/98
				AU	4080497	A	06/03/98
				EP	0920514	A	09/06/99
				WO	9807865	A	26/02/98
<hr/>							
WO	9626281	A1	29/08/96	AU	698254	B	29/10/98
				AU	4980496	A	11/09/96
				CA	2213343	A	29/08/96
				EP	0811069	A	10/12/97
				JP	11500315	T	12/01/99
				US	5770442	A	23/06/98
<hr/>							
WO	9720575	A1	12/06/97	AU	1282297	A	27/06/97
				CA	2237059	A	12/06/97
				EP	0866721	A	30/09/98
				US	5871727	A	16/02/99
<hr/>							
WO	9941359	A1	19/08/99	AU	3294099	A	30/08/99